

Guidance for Ethanol Facilities Seeking an Efficient Producer Pathway that Allows Co-Production of Corn Starch and Fiber Ethanol

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Transportation and Climate Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

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Purpose

This document provides guidance on the steps to follow for corn ethanol facilities that co-produce ethanol from corn starch and corn kernel fiber (CKF) and that seek to generate renewable fuel (D-code 6) RINs for the corn starch ethanol through an Efficient Producer Petition Process (EP3) pathway and concurrently generate cellulosic biofuel (D-code 3) RINs for ethanol produced from CKF.¹ This document provides background information on the EP3 petition process, followed by guidance on the process steps. This guidance is not binding, nor does it create any new obligations on the regulated community. It does not affect the EPA's review of new RFS pathway petitions submitted pursuant to 40 CFR 80.1416. The EPA reviews pathway petitions on a case-by-case basis. The information in this document may not be relevant in specific situations.

Background

The EPA evaluates the lifecycle greenhouse gas (GHG) emissions associated with biofuel pathways to determine whether the fuels meet the statutory GHG reduction requirements for eligibility under the RFS program.² In 2014, the EPA developed the expedited EP3 process for ethanol producers that demonstrate superior process efficiency, such as through reduced onsite energy consumption per gallon of ethanol produced.

Efficient Producer Pathways and Corn Kernel Fiber Ethanol

To date, the EPA has approved EP3 pathways for over 85 ethanol production facilities. Volumes of corn starch ethanol produced through approved EP3 pathways are eligible to generate D-code 6 RINs ("D6 corn starch ethanol"). The existing EP3 approvals generally have been conditional upon the facility generating only D-code 6 RINs. There is currently only one EP3 pathway approval, from October 2017,³ which allows a facility to generate D6 RINs for corn starch ethanol while also generating D3 RINs for ethanol produced from corn kernel fiber ("D3 CKF ethanol"). Very few facilities are currently registered for a D3 CKF ethanol pathway, but multiple facilities may be interested in registering for this pathway.

To facilitate additional co-production of CKF ethanol in the EP3 context, and to streamline the process steps for these facilities, we are updating our guidance for the EP3 process. First, we are updating the "How to Prepare an Efficient Producer Petition" document to clarify that facilities may petition for EP3 pathways that co-produce D6 corn starch ethanol and D3 CKF ethanol and, upon approval, may register for a D3 CKF pathway. Second, we are updating the "Efficient Producer Lifecycle Greenhouse Gas Calculator" and associated instructions. Third, we are creating a new template for corn starch ethanol EP3 determinations that incorporates co-production of D3 CKF ethanol.

¹ This guidance only applies to dry mill ethanol facilities that use only corn as feedstock. Test methods that meet the RFS regulatory criteria are not currently available to measure CKF ethanol production for facilities that also use grain sorghum, or other feedstocks.

² For more information see: <https://www.epa.gov/renewable-fuel-standard-program/fuel-pathways-under-renewable-fuel-standard>

³ <https://www.epa.gov/sites/default/files/2017-10/documents/little-sioux-corn-prod-deter-ltr-2017-10-24.pdf>

Available Next Steps

We are listing available next steps for facilities that would like to produce D6 corn starch ethanol through an EP3 pathway while also co-producing D3 CKF ethanol. These facilities can:

1. Prepare and submit an EP3 pathway petition, pursuant to 40 CFR 80.1416, requesting an EP3 pathway that allows for co-production of D6 corn starch ethanol and D3 CKF ethanol.⁴
2. Upon EPA's approval of the pathway petition, prepare and submit registration applications for 1) the new EP3 pathway and 2) the D-code 3 pathway for CKF ethanol.
3. Coordinate with the EPA as necessary to ensure that all registration application requirements are met and receive the EPA's acceptance of the registration application submitted in step 2.

Contact for Questions

For questions on about this guidance please contact us via the Fuels Program Helpdesk at:

<https://www.epa.gov/renewable-fuel-standard-program/forms/contact-us-about-renewable-fuel-standards#support-line>

⁴ For instructions see: <https://www.epa.gov/renewable-fuel-standard-program/how-prepare-efficient-producer-petition-under-renewable-fuel>